The Technology Transition Business Environment

- Presented to the Program Management for S&T Managers Course

STM 301

25 May 2004

Reference Material

- Manager's Guide to Technology Transition In an Evolutionary Acquisition Environment – January 31, 2003

http://www.acq.osd.mil/dpap/Docs/AQ201S1v10Complete.pdf

- Contracting for the Rest of Us – ASN(RDA) CD – NAVSO P -3689 – October 2000

http://www.acq.osd.mil/dpap/Docs/ctrrestofus.pdf

OUTLINE

- **Fundamental Principles**
- **Organization Elements**
- **The Contracting Process**
  - **Acquisition Planning Phase**
  - **Contract Formation Phase**
  - **Execution and Sustainment Phase**
- **Summary**

Fundamental Principles

- **The Program Manager (PM) is responsible for the program.**
- **The PM and the Contracting Officer (CO), together, are responsible for ensuring that the contract forms an integral part of the program.**
- **Only warranted COs have the authority to:**
  - **Enter into, administer, or terminate contracts**
  - **Make determinations and findings**
  - **Bind the government to the extent delegated in the contract**
- **Only the CO, or personnel identified in the contract, can give direction under the terms and conditions of the contract**
- **Funds must be available before the contract is let.**

Organization Elements

- **The Program Manager (PM) has the ultimate decision responsibility over a program.**
- **The PM must:**
  - **Accept program direction from acquisition executives and implement it expeditiously and conscientiously**
  - **Manage the programs to the best of his/her abilities within approved resources**
  - **Be customer focused and provide the user with the best, most cost-effective system or capability**
  - **Innovate, strive for optimal solutions, seek better ways to manage, and provide lessons learned to those who follow**
  - **Be candid about program status, including risks and problems, as well as potential solutions and likely outcomes**
  - **Prepare thorough estimates of financial and personnel resources that will be required to manage the program**

Organization Elements

- **Contracting Officers (COs) are warranted by their respective agencies to issue legal contracts between the US Government and a contracting entity.**
- **COs have the responsibility to:**
  - **Ensure all requirements of law, executive orders, regulations, and all other applicable procedures, including clearances and approvals, have been satisfied**
  - **Ensure sufficient funds are available for obligation**
  - **Ensure contractors receive fair and equitable treatment**
  - **Request and consider the advice of specialists in audit, law, engineering, transportation, and other fields as appropriate**
  - **Document that the proposed contract is in the best interest of the government**
  - **Issues timely contracts and contract changes**

Organizational Element

- **Technical personnel are responsible to the PM for the design, development, test, production, logistics support, and disposition of a weapon system.**
- **Science and technology personnel are responsible for describing the technology or capability to be delivered, analyzing risk, and providing a technology development strategy to expedite the transition of technology to the PM.**

The Contracting Process

DOD Component
Has $$
Need
Services/Products

Contractor
Has Services/Products
Need $$

Acquisition Planning

Contract Formation

Execution and Sustainment

Acquisition Planning Phase

- **Determination and Analysis of Need - (PM, CO, legal, etc.)**
  - **Forecasting of Requirements (Preparing program plans, cost estimates & schedules, Identifying TRLs, etc.)**
  - **Market Research (Trade studies, acquisition histories)**
  - **Funding (Is adequate funding available?)**
- **Extent of Competition**
  - **Competition in Contracting Act (CICA)**
  - **Justification for Other than Full and Open (Lead time)**
  - **Sole Source Justification**
  - **Set-aside Determinations**
- **Source Selection Planning**
  - **Lease vs. Purchase (Life cycle cost considerations)**
  - **Price/Non-Price Related Factors (Trade-Offs, CAIV)**
  - **Lowest Price vs. Best Value**
- **Solicitation Terms and Conditions**
  - **Identify the type of contract pricing arrangements (Fixed price, Cost Plus Award Fee, etc..) that will best mitigate risk (Provide input on program technical risk)**
  - **Use of Incentives**

Contract Formation Phase

- **Solicitation Of Offers**
  - **Ensure that all qualified offerors are afforded the opportunity to compete (Performance based)**
  - **Tailor special incentive/award fees, if appropriate**
  - **Publicize Proposed Procurements (FedBizOpps)**
  - **Preproposal Conferences**
- **Source Selection**
  - **Score proposals iaw evaluation factors**
  - **Price reasonableness analysis (Is a low proposal technically qualified?)**
  - **Competitive range determination**
  - **Technical evaluation – Quality is a Criterion**
  - **Relative importance to cost is indicated**
  - **Debriefing of unsuccessful offerors**
  - **Past Performance - CPARS – Contractor Performance Assessment Reporting System**
- **Contract Award**
  - **Review subcontracting plans**
  - **Notification of award/Preparation of positions for a protest**

Solicitation Methods

- **RFP**
  - **FAR Part 15**
  - **Government describes the results desired**

  vs.,
- **BAA/RA**
  - **A competitive solicitation for basic and applied R&D not related to the development of a specific system or hardware procurement**
  - **Government can award multiple contracts, grants cooperative agreements, OTs, and TIAs**

  vs.
- **Unsolicited Proposals**

Distinctions Among S&T Business Arrangements

	Contract	Grant/Cooperative Agreement	Other Transactions for Prototype Projects	Technology Investment Agreement
Principal Purpose	**Acquisition**	**Assistance**	**Acquisition**	**Assistance**
Funding	**Full funding**	**Full funding**	**Full or partial funding**	**Full or partial funding**
Publicity	**FedBizOpps**	**FedBizOpps**	**FedBizOpps**	**FedBizOpps**
Involvement Level of Government	**Oversight Only**	**Substantial for cooperative agreements**	**Substantial oversight and partnering with industry**	**Substantial oversight and partnering with industry**
Typical S&T Product	**Deliverable end product**	**Research reports or training**	**Deliverable end product**	**Research reports**
Typical Recipient	**Traditional for-profit government contractor**	**Educational or nonprofit institution**	**Traditional government contractor with significant involvement by nontraditional for-profit commercial company**	**Traditional government contractor with significant involvement by nontraditional for-profit commercial company**
Solicitation Methods	**Request for proposal, broad agency announcement, unsolicited**	**Broad agency announcement, research announcement, unsolicited**	**Broad agency announcement, research announcement, program**	**Broad Agency announcement, research announcement, unsolicited**

Procurement Contract

- **To acquire goods or services for the direct benefit or use of the U.S. Government (Acquisition)**
- **Framework is contained in the FAR and DFAR to provide quality products on a timely basis at reasonable costs**
- **Full and open competition**
- **Market research leads to development of an acquisition plan**
- **Statement of work and evaluation criteria**
- **Contract award defines rights and responsibilities of the parties (cost, schedule, and performance)**

Contract Types Characteristics

COST	**VS**	**FIXED PRICE**
Promise	**Best Effort**	**Shall Deliver**
Risk to Contractors	**Low**	**High**
Risk to Government	**High**	**Low**
Perf Payments	**As incurred**	**On delivery**
Progress Payments	**None**	**% of actual**
Administration	**Max G Surv**	**Min G Surv**
Fee/Profit	**Max (6/15%)**	**No limit**

Policies for Contract Type

- **Relatively Broad Discretion**
- **Goal is to seek appropriate risk allocation**
- **Restrictions on cost reimbursement fees**
  - **CPAF --Base Fees Range 0-3%**
  - **CPFF**
    - **R&D – 15%**
    - **Production – 10%**
    - **A&E – 6%**
- **No Cost-Plus-Percentage-of-Cost Contracts**

Contract Types

- **CPFF – CPIF – FFP – FPIF**
- **Selected contract type reflects the parties estimation of the extent of risk and an allocation of that risk (Shall deliver vs. best effort)**
- **With either cost or fixed price type contracts, more or less incentive can be placed upon the control of costs**
- **Cost reimbursement contracts place fewer cost controls on a contractor, and therefore, must be more closely monitored by the government**

INCENTIVES

- **Government Incentives**
  - **Milestone payments can be an incentive to strive for better research results**
- **Contractor Incentives**
  - **Award-Term Incentives – The government announces up front that it intends to shorten or lengthen the contract period based on the contractor's performance**
  - **Intellectual Property Rights – Negotiation of fewer government IP rights**
  - **Cost-Based Incentives – Share-in-savings provision – Contractor shares in savings resulting from innovation**

Other Transactions for Prototypes Section 845

- **Non-Procurement contracts (acquisition) used to develop prototypes for or in support of weapon systems**
- **Not subject to the FAR and many contract-type statutes**
- **Government must justify that benefits will be realized which might not be possible under a FAR contract**
  - **Attracts non-traditional DOD contractor**
  - **Relief from CAS and FAR cost principles and substantial government auditing**
  - **Flexibility with respect to data and patent rights and general terms and conditions**
  - **Requires substantial cost sharing from contractors**

Grants and Cooperative Agreements

- Principal purpose is the transfer of something of value to a recipient to carry out a public purpose of support or stimulation authorized by U. S. law
- Substantial involvement
- Usually issued to academia and nonprofit organizations
- DODGARs
- OMB Circulars A -110 and A-102

Technology Investment Agreements

- **Assistance Instruments – DODGARs**
- **Can provide commercial firms relief from government audit, government cost principles, CAS, and TINA**
- **Technical milestone payments**
- **Flexibility in patent rights**
- **Provides government increased technical insight into research**
- **Cost sharing**

Execution and Sustainment Phase

- **Initiation of Work and Modification**
  - **Contract Administration Delegation**
  - **Subcontract Control – SBA**
  - **Options (Extensions)**
- **Design and Production Assurance**
  - **Monitoring, Inspection, and Acceptance (Technology Readiness Assessments)**
  - **Risk Management, Including Technical Risk Management (TRLs)**
  - **Engineering Change Proposals (ECP) – Value Engineering Contract Proposal (VECP) (Impact on cost/schedule)**
  - **Design Reviews**
  - **Configuration Management (Buy data rights?)**

Execution and Sustainment Phase

- **Payment and Accounting**
  - **Invoices – Progress Payments – Milestone Payments**
  - **CAS**
  - **Indirect Costs (Adjust billing rates)**
  - **Defective pricing**
- **Special Terms**
  - **GFP (Disposition)**
  - **Intellectual Property**
  - **Socioeconomic Terms (SADBU)**
- **Contract Closeout and Termination**
  - **Claims**
  - **Terminations**
  - **Contract Completion Documentation**

Summary

- **What a DOD contract says is what the Government gets.**

- **For DOD S&T personnel to be an effective member of the DOD acquisition team, they need to understand**
  - **the user's need**
  - **the technology necessary to satisfy the need**
  - **the acquisition process and**
  - **the overall contracting process**